AMENDMENTS TO THE CLAIMS

1. (Currently amended) A solid-state imaging apparatus comprising:

a solid-state imaging device having a plurality of pixels that image light originating from a subject, by dividing the light into a plurality of color signals with a plurality of types of color filters provided with said plurality of pixels; and

a signal processor that subjects photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to plurality of light source types,

wherein the solid-state imaging device further comprises a plurality of sensors and a plurality of filters, each sensor associated with a respective filter, wherein each of the plurality of filters is different from said plurality of types of color filters and has a different transmission characteristic ~~than others of the plurality of filters~~from those of said plurality of types of color filters, wherein the plurality of sensors detect light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the plurality of sensors being provided on the surface of the solid-state imaging device, wherein said plurality of filters are dispersed uniformly over the surface of the solid-state imaging device; and

wherein the signal processor further comprises: a mixing ratio estimation unit that determines a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the plurality of sensors; and a gain computation unit that computes a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

2. (Original) The solid-state imaging apparatus according to claim 1, wherein the mixing ratio and the gain are determined with respect to each of the pixels.

3. (Original) The solid-state imaging apparatus according to claim 1, wherein the signal processor comprises:

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a color tone correction unit for correcting a color tone by multiplying color difference signals determined from the photographed image data by a color difference matrix; and

a color difference matrix correction unit for correcting coefficients of the color difference matrix in accordance with the mixing ratio.

4. (Previously presented) The solid-state imaging apparatus according to claim 1, wherein the signal processor comprises a light source type determination unit that determines the type of at least one of the first light source and the second light source from the photographed image data.

5. (Canceled)

6. (Currently amended) A digital camera comprising:

a solid-state imaging device having a plurality of pixels that image light originating from a subject, by dividing the light into a plurality of color signals with a plurality of types of color filters provided with said plurality of pixels; and

a signal processor that subjects photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to a plurality of light source types,

wherein the solid-state imaging device further comprises a plurality of sensors and a plurality of filters, each sensor associated with a respective filter, wherein each of the plurality of filters is different from said plurality of types of color filters and has a different transmission characteristic <u>from those of said plurality of types of color filters</u>than others of the plurality of filters, wherein the plurality of sensors detect light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the plurality of sensors being provided on the surface of the solid-state imaging device<u>, wherein said plurality of filters are dispersed uniformly over the surface of the solid-state imaging device</u>; and

wherein the signal processor further comprises: a mixing ratio estimation unit that determines a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the plurality of sensors; and a gain computation unit that computes a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

7. (Currently amended) A solid-state imaging apparatus comprising:

a solid-state imaging device having a plurality of pixels for imaging light originating from a subject, by dividing the light into a plurality of color signals with a plurality of types of color filters provided with said plurality of pixels; and

signal processing means for subjecting photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to a plurality of light source types,

wherein the solid-state imaging device further comprises a plurality of sensors and a plurality of filters, each sensor associated with a respective filter, wherein each of the plurality of filters is different from said plurality of types of color filters and has a different transmission characteristic from those of said plurality of types of color filters~~than others of the plurality of filters~~, wherein the plurality of sensors detect light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the plurality of sensors being provided on the surface of the solid-state imaging device, wherein said plurality of filters are dispersed uniformly over the surface of the solid-state imaging device; and

wherein the signal processing means further comprise: mixing ratio estimation means for determining a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the plurality of sensors; and gain computation means for computing a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

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8. (Currently amended) A digital camera comprising:

a solid-state imaging device having a plurality of pixels for imaging light originating from a subject, by dividing the light into a plurality of color signals with a plurality of types of color filters provided with said plurality of pixels; and

signal processing means for subjecting photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to a plurality of light source types,

wherein the solid-state imaging device further comprises a plurality of sensors and a plurality of filters, each sensor associated with a respective filter, wherein each of the plurality of filters is different from said plurality of types of color filters and has a different transmission characteristic from those of said plurality of types of color filtersthan others of the plurality of filters, wherein the plurality of sensors detect light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the plurality of sensors being provided on the surface of the solid-state imaging device, wherein said plurality of filters are dispersed uniformly over the surface of the solid-state imaging device; and

wherein the signal processing means further comprise: mixing ratio estimation means for determining a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the plurality of sensors; and gain computation means for computing a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

9. (Currently amended) The solid-state imaging apparatus of claim 1, wherein said plurality kinds of filtersof types of color filters are red (R), green (G), and blue (B) filters.

10. (Currently amended) The digital camera of claim 6, wherein said plurality of types of color filters kinds of filters are red (R), green (G), and blue (B) filters.

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11. (Currently amended) The digital camera of claim 8, wherein said plurality <u>of types of</u> <u>color filters</u>kinds of filters are red (R), green (G), and blue (B) filters.

12. (Previously presented) The solid-state imaging apparatus of claim 1, wherein the plurality of sensors comprise two sensors, wherein peak sensitivity wavelengths for the sensors are substantially within 100 nm of each other.

13. (Previously presented) The solid-state imaging apparatus of claim 1, wherein the plurality of sensors are pixels of the solid-state imaging device which also image light originating from the subject.

14. (Previously presented) The solid-state imaging apparatus of claim 13, wherein the plurality of sensors are adjacent pixels of the solid-state imaging device.